

Title (en)  
ENERGY SUPPLY SYSTEM OF A RAIL VEHICLE

Title (de)  
ENERGIEVERSORGUNGSSYSTEM EINES SCHIENENFAHRZEUGS

Title (fr)  
SYSTÈME D'ALIMENTATION EN ÉNERGIE D'UN VÉHICULE SUR RAIL

Publication  
**EP 3500473 B1 20200603 (DE)**

Application  
**EP 17755480 A 20170817**

Priority  
• EP 16191459 A 20160929  
• EP 2017070833 W 20170817

Abstract (en)  
[origin: WO2018059826A1] The invention relates to a rail vehicle (1) comprising an energy supply system for supplying electric loads. The rail vehicle (1) has railway carriages (2), and the rail vehicle (1) has a train busbar (3). The aim of the invention is to improve the energy supply system of the rail vehicle (1). This is achieved in that the rail vehicle (1) has a DC supply busbar (4) and a 3AC busbar (5), and the DC supply busbar (4) and the 3AC busbar (5) extend over at least two of the railway carriages (2). The DC supply busbar (4) is connected to the train busbar (3) via a central energy supply unit (11), and the central energy supply unit (11) is arranged in a first railway carriage (21) of the at least two railway carriages (2) over which the DC supply busbar (4) and the 3AC busbar (5) extend. A respective decentralized energy supply unit (12) is arranged in at least one second railway carriage (22) of the at least two railway carriages (2), and the decentralized energy supply unit (12) is connected to the DC supply busbar (4) and the 3AC busbar (5). The invention additionally relates to a method for operating the energy supply system of such a rail vehicle (1).

IPC 8 full level  
**B61C 17/00** (2006.01); **B60L 1/00** (2006.01); **B60L 1/10** (2006.01); **B60L 1/14** (2006.01); **B61D 1/00** (2006.01); **B61D 27/00** (2006.01)

CPC (source: EP)  
**B60L 1/00** (2013.01); **B60L 1/10** (2013.01); **B60L 1/14** (2013.01); **B61C 17/00** (2013.01); **B60L 2200/26** (2013.01)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3300982 A1 20180404**; EP 3500473 A1 20190626; EP 3500473 B1 20200603; ES 2815424 T3 20210330; WO 2018059826 A1 20180405

DOCDB simple family (application)  
**EP 16191459 A 20160929**; EP 17755480 A 20170817; EP 2017070833 W 20170817; ES 17755480 T 20170817